

Weathering the Storm In More Ways Than One

HARRIS COUNTY, TX – For the last 25 years, the University of Texas MD Anderson Cancer Center in Houston, Texas, has consistently ranked among the top two cancer care hospitals in the nation, according to a survey published by U.S. News & World Report. The hospital’s staff of more than 19,000 treat an average of 114,000 patients a year from around the world.

The center’s ranking reflects the expertise and accomplishments of the physicians, researchers, nurses, staff and volunteers in treating patients. Safeguarding staff, patients and property is essential and the focus of multiple disaster mitigation and notification initiatives at the facility.

“It’s important that we be here for the patients. We don’t want to be closed. If there is a significant event, we want to be up and running as soon as possible to minimize down time,” said MD Anderson Executive Director of Environmental Health and Safety Matthew Berkheiser. “Patients wanting their treatment are literally knocking on our door as soon as the storm is over. If you have a broken leg, you could probably wait a few days to get it checked. Our patients are very serious and committed to getting in here.”

In 2001, Tropical Storm Allison caused catastrophic damage to the center, which suffered significant damage and undertook a major mitigation project to protect the center from another flood. “We came up with a list of things that we felt we could do better. Money was made available from the Federal Emergency Management Agency to enhance mitigation already in place.

We used the funds to enhance our floodgate system,” said Director of Environmental Health and Safety Devina Patel. “Now we have about 70-80 floodgates, a combination of different kinds of gates as well as submarine doors.”

FEMA’s Hazard Mitigation Grant Program (HMGP) helped to fund the flood mitigation project. The work consisted of building interior and exterior flood walls and relocating critical mechanical and electrical life-saving equipment above the 50-year floodplain – floods that have a 2 percent probability (1 in 50) of being equaled or exceeded in any year. A concrete wall was constructed around the entire facility.

The project also called for the installation of 25 floodgates (located at entrances and drives), submarine doors, and a series of valves and lift stations to isolate the sanitary and storm systems.

“We have annual unannounced drills to test the floodgate system as well as the competency of the people who are installing the gates,” said Patel.

“A lesson learned from Hurricane Allison was that we needed a stationary command center,” said Patel. “Depending on who was in charge, the command center kept moving making communication an issue. Now we have one that’s stationary and fully staffed.”



Flood wall at one of the entrances to the University of Texas MD Anderson Cancer Center located in Houston, Texas
(Photo courtesy of MD Anderson Cancer Center)

Berkheiser added, “During Hurricane Ike, we lost our water system. Now we have a well on one of our campus locations. We have two trucks that we can fill up, transport to the main campus and pump water into the hospital to take care of essential needs until the water system is up and running again.”

Research animals also are protected during storms. “We have 30 thousand mice so we have staff on board to care for them.” Berkheiser said.

As a shelter-in-place facility, Berkheiser explained that the hospital has executed projects aimed at minimizing threats from hurricanes and tornadoes. “We don’t have a designated shelter area. All of our buildings are constructed to the life safety code,” Berkheiser said. “We have a roof management system in place and hurricane film on inpatient and key buildings windows.”

He noted MD Anderson Alert is the institution’s emergency notification system that warns and instructs employees on imminent threats to their safety. Emergency text and voice alerts are distributed via institutional email, pager, phone and mobile devices. Berkheiser said the system is flexible and very useful. “We send messages to selected devices based on the threat level and risk to the mission of MD Anderson.” The hospital also has a phone line that provides updates on the institution’s operational status before, during and following a hurricane.

In terms of patient care, the hospital has two teams responsible for the care of approximately 650 patients during and immediately after hurricanes – a hurricane ride-out team and a recovery team.

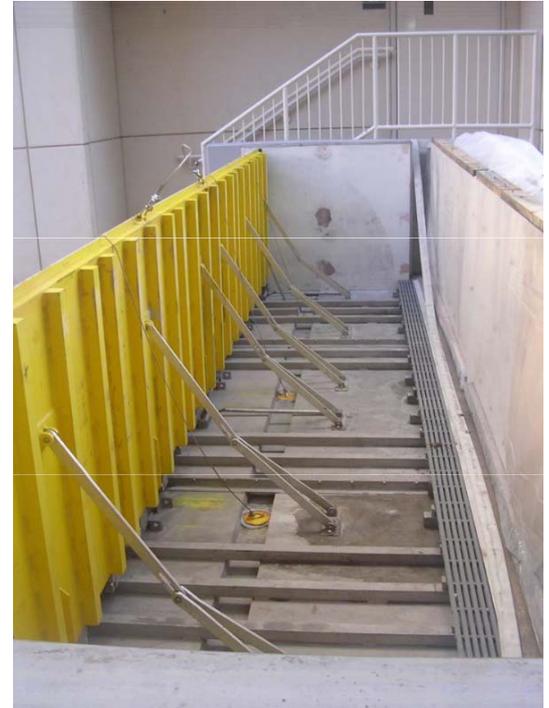
Employees may volunteer or they may be assigned to serve on either team; however hurricane ride-out team members come from departments that are critical to patient care. All members on both teams are required to understand their responsibilities during a hurricane or other weather event.

“They need to be prepared at home so they can be prepared to help continue the mission at work. An employee with a plan is better able to provide the highest possible level of care to our patients, because they are not distracted by concerns for their dependents, homes or pets,” Patel added.

The Environmental Health and Safety Department has produced a hurricane preparedness booklet for its employees and patients as part of its education and outreach activities. Included is information on hurricane planning resources, such as creating a disaster plan and kit, preparing their home for storms, arranging for the care of pets and hurricane evacuation contraflow routes for the city of Houston.

“We will continue to use lessons learned following emergency events to implement activities that will minimize risks to safety and health,” said Patel. As part of ongoing efforts, the hospital conducts comprehensive, proactive assessments that evaluate the potential adverse impact of hazards on buildings, grounds, equipment and occupants.

For additional information on Multiple Ways to Weather Storms, visit: www.fema.gov/hazard-mitigation-grant-program and www.mdanderson.org.



Floodgates for Research Building at Houston, Texas campus
(Photo courtesy of MD Anderson Cancer Center)